

Rejection of Claims 1 - 8, 10, 11, and 13 - 21 under 35 USC §102

In item 3, on pages 2 - 4 of the Office Action, the Examiner rejected claims 1 - 8, 10, 11, and 13 - 21 under 35 USC §102 as being anticipated by U.S. Patent 5,566,098 to Lucente et al.

The Present Invention

The present claimed invention is directed toward a system for orienting a displayed image with respect to a user viewing a display. As the display is rotated with respect to a user viewing the display, the displayed image's orientation, such as that of a house, remains fixed with respect to the display. In other words, that portion of the image displayed toward the front of the display remains displayed toward the front of the display while the display is rotated, thereby exposing a side of the image to the user (i.e., as the display rotates, the view of the house also rotates with respect to the user). Any user interface element or information displayed to the user, such as a menu, remains oriented toward the user as the display is rotated (i.e., the menu remains facing the user as the displayed image of the house rotates).

The Lucente et al. Reference

Lucente et al. discloses a computer display system that permits a user to select an orientation (landscape or portrait) for an image relative to the orientation of the display (Lucente et al. at abstract; Col. 2, line 63 - Col. 3, line 2). The flat panel display of the portable computer can be rotated to either a portrait (vertical) or a landscape (horizontal) orientation (Col. 5, line 65 - Col. 6, line 1). The display has a mechanical switch so the user can manually change the display for proper viewing in either portrait or landscape mode (Col. 6, line 48 - Col. 7, line 4). Alternatively, the switch could be a mercury switch such that as the orientation of the computer is changed, the display would be properly aligned appropriately (Col. 7, lines 5 - 12).

The Present Claimed Invention Patentably Distinguishes Over Lucente et al.

The present claimed invention, using claim 1 as an example, recites "a display processor

adjusting the use orientation of the user interface element relative to the spatial orientation as the spatial orientation changes with the use orientation remaining fixed with respect to a user orientation reference as the spatial orientation changes with respect to the user orientation reference.” Referring to Figs. 3a and 3b, as a display 32 rotates through the arc 38 (“spatial orientation changes”), the use orientation of the user interface element (menu) 30 remains fixed with respect to a user orientation reference 36. Furthermore, as the display 32 rotates, the displayed image 34 turns with the display. Therefore, the two display elements 30 and 34 do not remain in alignment with respect to each other as the display rotates. In contrast, Lucente et al. teaches manual and automatic rotation of an entire display image as the display screen itself is rotated to either a portrait or a landscape mode (Lucente et al. at Col. 5, line 65 - Col. 6, line 2; Col. 6, line 50 - Col. 7, line 13). That is, part of the image does not stay fixed while part of the image rotates in the Lucente et al. system. Such a system as disclosed by Lucente et al. system is actually disclosed in the present specification at page 2, lines 9 - 30 as prior art. As noted in the present specification at page 2, lines 22 - 24, the entire displayed image in the prior art system, including menu elements, is maintained in the same orientation with respect to the user. However, in contrast to Lucente et al. and as clearly claimed herein, the orientation of the menu interface element remains fixed with respect to a user’s orientation while the spatial orientation of the display changes.

The Applicants respectfully traverse the Examiner’s assertion on page 7 of the Action regarding what the Lucente et al. abstract discloses. First, the abstract of Lucente et al. does not support the Examiner’s assertion that “the monitor can rotate while the menu of information on the display is oriented to the user orientation.” The Applicants respectfully point out that the abstract of Lucente et al. is completely silent regarding any displayed menu or the orientation of the user. Furthermore, notwithstanding the deficiencies of the abstract of Lucente et al., the present claimed invention recites a use orientation remaining fixed with respect to a user orientation reference while the spatial orientation of the display changes with respect to the user orientation reference. The displayed image of Lucente et al. does not teach such a bifurcated

display and, instead, merely discloses the reorientation of the entire displayed image, dependent upon the orientation of the display screen itself.

By amendment filed September 27, 1999, the following feature, using claim 1 as an example, has been added to independent claims 1, 8, 10, 11, 13, 20, and 21: "with the use orientation remaining fixed with respect to a user orientation reference as the spatial orientation changes with respect to the user orientation reference." Additionally, the September 27, 1999 amendment added the feature "the function of the display being aligned with respect to a user orientation reference while an image of the display is allowed to spatially change with respect to the user orientation reference as the spatial orientation of said display changes" in independent claim 16. This same amendment added to claims 17 and 19 the feature of maintaining orientation of a user interface with respect to a user orientation reference independent of the physical position of a displayed image with respect to the user. The Examiner has maintained the same art rejection as presented in the prior, May 27, 1999 office action. Therefore, in view of the added features to the above independent claims, the Examiner has failed to meet all of the claim limitations of claims 1 - 8, 10, 11, and 13 - 21, as required by MPEP §706.02(j). *In re Wilder*, 166 USPQ 545, 548 (CCPA 1970) (noting that to make a prima facie case of obviousness, every critical element claimed must be addressed).

Claims 2 - 7 depend from claim 1 and include all the limitations of that claim plus additional limitations which are not taught or suggested by the prior art. For example, claim 7 recites "a view point of an image changes as the display changes orientation ". Therefore, for at least this reason and the reasons set forth above with respect to claim 1, it is submitted that claims 2 - 7 patentably distinguish over the prior art.

Claims 14 - 15 depend from claim 13 and include all the limitations of that claim plus additional limitations which are not taught or suggested by the prior art. For example, claim 15 recites "a work image on the display is oriented relative to the current orientation." Therefore, for at least this reason and the reasons set forth above with respect to claim 13, it is submitted that claims 14 - 15 patentably distinguish over the prior art.

Claim 18 depends from claim 17 and include all the limitations of that claim plus additional limitations which are not taught or suggested by the prior art. For example, claim 18 recites “a view point of an image on said display changes as orientation of the display changes.” Therefore, for at least this reason and the reasons set forth above with respect to claim 17, it is submitted that claim 18 patentably distinguishes over the prior art.

Rejection of Claims 9 and 10 under 35 USC §102

In item 5 on page 5 of the Office Action, the Examiner rejected claims 9 and 10 under 35 USC §102 as being anticipated by U.S. Patent 5,329,289 to Sakamoto et al.

The Sakamoto et al. Reference

Sakamoto et al. discloses a rotatable, rectangular computer display that can be oriented to either a vertical or a horizontal position (Sakamoto et al. at abstract; Col. 2, lines 15 - 22). The image displayed on the display screen is automatically formatted to the horizontal or vertical alignment (Col. 2, lines 19 - 23).

The Present Claimed Invention Patentably Distinguishes Over Sakamoto et al.

As discussed above regarding claim 1, the present claimed invention, using claim 9 as an example, recites “allowing a work image to change orientation corresponding to a change in orientation of said display monitor with respect to a user orientation reference while interface elements remain in a fixed orientation with respect to the user orientation reference.” The Examiner has relied on Figs. 6 and 7 of Sakamoto et al. to allegedly teach this feature. However, these corresponding figures of Sakamoto et al. disclose that the entire image, including the interface elements, rotates to accommodate the changed orientation of the display screen. Sakamoto et al., as with the Lucente et al. reference, merely teaches the reorientation of an entire display image to either portrait (vertical) or landscape (horizontal) orientation in response to the rotation of the display screen and fails to disclose the bifurcated orientation as discussed

previously with respect to this claim.

Rejection of Claim 12 under 35 USC §103

In item 7, on page 6 of the Office Action, the Examiner rejected claim 12 as being unpatentable over Lucente et al. in view of Sakamoto et al.

The Present Claimed Invention Patentably Distinguishes Over the Prior Art

As regards claim 12, and as discussed above regarding claim 1, neither Lucente et al. nor Sakamoto et al. teach the bifurcated display feature of claim 12 whereby a displayed user menu interface element remains fixed with respect to a user orientation reference as the spatial orientation of the display changes with respect to the user orientation reference.

While the Applicants concede that Lucente et al. and Sakamoto et al. are in the analogous art of display image orientation, the Applicants respectfully assert that the two references teach identical concepts of reorienting an entire image to either portrait (vertical) or landscape (horizontal) mode to correspond to the physical orientation of a rectangular display screen. As such, the disclosure of neither reference is particularly revealing in that such a concept has already been disclosed as known prior art in the present specification at page 2. More specifically, however, and as more thoroughly discussed above, since neither Lucente et al. nor Sakamoto et al. disclose the present claimed invention, the combination of these two references is equally deficient as regards allegedly rendering the present claimed invention obvious.

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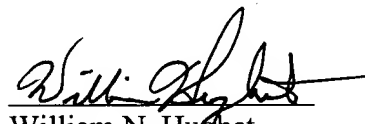
Summary

It is submitted that none of the references, either taken alone or in combination, teach the present claimed invention. Thus, claims 1 - 21 are deemed to be in a condition suitable for allowance. Entry of the amendment, reconsideration of the claims, and an early Notice of Allowance are earnestly solicited. If any fees are required in connection with the filing of this Amendment, please charge same to Deposit Account No. 19-3935.

Respectfully submitted,

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